AMENDMENT OF SOLICIT	ΓΔΤΙΩΝ/ΜΩΝΙ	FICATION OF CONTRACT	1. CONTRACT	ID CODE	PAGE OF 1	PAGES			
AMENDMENT OF SOLICI	IATION/MODII	TICATION OF CONTRACT	J		1	3			
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	•	5. PROJECT	NO.(If applicab	le)			
0003	16-Sep-2002	W22W9K-2137-3365							
6. ISSUED BY CODE	DACA27	7. ADMINISTERED BY (If other than item 6) PROCUREMENT BRANCH	CO	DE DAC	A27				
USA ENGINEER DISTRICT, LOUISVILLE ATTN: CELRL-CT 600 DR. MARTIIN LUTHER KING PLACE ROOM 821 LOUISVILLE KY 40202		PROCUREMENT BRANCH ATTN: LISA M. FRAZIER P. O. BOX 59 LOUISVILLE KY 40201-0059							
8. NAME AND ADDRESS OF CONTRACTOR	(No Street County St	tate and Zin Code)	x 9A. AMENDM	ENT OF SOI	LICITATION	NO.			
o. While had had had held of contractor	(110., Bucci, County, Bi	and Lip Code)	DACA27-02-B						
			X 9B. DATED (SI 17-Jun-2002	EE ITEM 11)	)				
			10A. MOD. OF	CONTRAC	T/ORDER NO	<del></del>			
		-	1.5						
CODE	<b></b>		10B. DATED (	SEE ITEM 1	3)				
CODE	FACILITY CO 11. THIS ITEM ONLY	DE L APPLIES TO AMENDMENTS OF SOLICI	 TATIONS						
X The above numbered solicitation is amended as set forth			X is extended,	is not exter	nded.				
Offer must acknowledge receipt of this amendment price		· · · · · ·	<u> </u>						
	-	ent; (b) By acknowledging receipt of this amendment of	-	submitted;					
or (c) By separate letter or telegram which includes a re	ference to the solicitation and	amendment numbers. FAILURE OF YOUR ACKNO	OWLEDGMENT TO BE						
RECEIVED AT THE PLACE DESIGNATED FOR THE									
REJECTION OF YOUR OFFER. If by virtue of this at provided each telegram or letter makes reference to the									
12. ACCOUNTING AND APPROPRIATION DA			•						
.2	iii (ii requireu)								
13. THIS I	TEM APPLIES ONLY	TO MODIFICATIONS OF CONTRACTS/O	ORDERS.						
		ACT/ORDER NO. AS DESCRIBED IN ITE							
A. THIS CHANGE ORDER IS ISSUED PURS CONTRACT ORDER NO. IN ITEM 10A.	SUANT TO: (Specify a	uthority) THE CHANGES SET FORTH IN	TEM 14 ARE MAD	E IN THE					
B. THE ABOVE NUMBERED CONTRACT/0	ORDER IS MODIFIED	TO REFLECT THE ADMINISTRATIVE C	HANGES (such as c	hanges in pay	ying				
		ANT TO THE AUTHORITY OF FAR 43.10	3(B).						
C. THIS SUPPLEMENTAL AGREEMENT IS	ENTERED INTO PUR	RSUANT TO AUTHORITY OF:							
D. OTHER (Specify type of modification and a	uthority)								
E. IMPORTANT: Contractor is not,	is required to si	gn this document and return	copies to the issuing	g office.					
14. DESCRIPTION OF AMENDMENT/MODIFI	CATION (Organized b	y UCF section headings, including solicitation	n/contract subject m	atter					
where feasible.) Solicitation No. DACA27-02-B-0009 for the	Julti-Purnose Digital 1	Fraining Range at Fort Knov, Kentucky, is	hereby amended	as follows:					
Constitution No. Britiship 62 B 6666 for the f	watti i arpose Bigitar i	raining range at 1 of thiox, remainly, is	Tiereby differiaca	ao ionowo.					
SEE ATTACHED									
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Except as provided herein, all terms and conditions of the doc									
15A. NAME AND TITLE OF SIGNER (Type or )	print)	16A. NAME AND TITLE OF CONT	TRACTING OFFICE	ER (Type or p	orint)				
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15B. CONTRACTOR/OFFEROR	15C. DATE SIGNE	ED 16B. UNITED STATES OF AMERI	CA	16	C. DATE SIC	NED			
		BY			6 Can 2002				
(Signature of person authorized to sign)	_	(Signature of Contracting Office	eer)	—   ¹	6-Sep-2002				
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30-105-04

EXCEPTION TO SF 30 APPROVED BY OIRM 11-84 STANDARD FORM 30 (Rev. 10-83) Prescribed by GSA FAR (48 CFR) 53.243

## SECTION SF 30 BLOCK 14 CONTINUATION PAGE

- 1. General Wage Decision No. KY020027 dated 8/16/2002 is hereby deleted in its entirety and replaced with attached General Wage Decision No. KY020027 dated 9/13/2002.
- 2. The submittal register is hereby deleted in its entirety and replaced with the attached submittal register.
- 3. Specification Section 00800 of the solicitation, Para. 1.36 "Sequence of Work and Special Project Requirements" is hereby amended to read as follows:

The waterline along Mt. Eden Road and connections on both ends shall be completed within 60 days of Notice to Proceed. 191st Tank BN Road shall be complete except for paving by 15 January 2003. After 15 July 2003, the Contractor shall regrade 191st Tank BN Road to prepare for paving and commence with normal construction activity on 191st Tank BN Road as outlined in the plans and specifications. Contractor will have access to areas North of Wilcox Lake after Notice to Proceed: Areas south of Wilcox Lake will not be available until after the UXO clearance procedures are completed as outlined below (approximately 3 weeks). The clearing limits shall be marked in the field within 30 days of Notice to Proceed in preparation for a surface burn by Range Control. Range Control will then clear UXO in the firebreak line approximately 20 feet wide around the clearing limits. After Range Control has cleared the UXO in the fire break line, the contractor shall remove trees and brush in the fire break area and then bog disc the fire break around the clearing limits. Range Control will then control burn the range area and clear UXO. After UXO clearance is complete, the range area south of Wilcox Lake will be turned over to the Contractor. All contractor POV's must enter through Pitts Point Road Gate, and the Contractor must provide an Access Control person to man that gate for 2 hours during morning operations and 2 hours during evening operations. Contractor must also provide an access control person at Mt. Eden Road Gate during all construction operations. All construction equipment and deliveries shall enter through Mt. Eden Road. Contractor shall not exceed the load limit of 15 Tons on Mt. Eden Road without providing the Contracting Officer written approval received from Bullitt County Fiscal Court. No construction traffic will be allowed to enter through the Brandenburg Gate and travel Main Range Road to the site during the period February 1st to July 15th 2003.

- 4. Specification Section 01355 of the solicitation is hereby deleted in its entirety and replaced with the attached Specification Section 01355.
- 5. Specification Section 02220a of the solicitation is hereby deleted in its entirety and replaced with the attached Specification Section 02220a.
- 6. Specification Section 02230a of the solicitation to include Appendix A & B Burn Plan is hereby deleted in its entirety and replaced with the attached Specification Section 02230a to include Appendix A Prescribed Fire Plan (Unexploded Ordinance (UXO) Surface Clearing).
- 7. Specification Section 03307a of the solicitation hereby revises Para. 3.2.1 to read:
  - "When weather conditions prevent proper placement and consolidation, concrete placement shall not be permitted without approval. When concrete is mixed and/or transported by a truck mixer, the concrete shall be delivered to the site of the work and discharge shall be completed within 1-1/2 hours. When the placing temperature is 90 degrees F or greater, the concrete shall be delivered to the site of the work and discharge shall be completed within 60 minutes. Under these conditions, the use of ice, retarders, nitrogen gas, etc. should be incorporated into the concrete mixture. A plan for this action should be submitted and approved by the Government. Concrete shall be conveyed from the mixer to the forms as rapidly as practicable by methods which prevent segregation or loss of ingredients. Concrete shall be in place and consolidated within 15 minutes after discharge from the mixer. Concrete shall be deposited as close as possible to its final position in the forms and be so regulated that it may be effectively

consolidated in horizontal layers 18 inches or less in thickness with a minimum of lateral movement. The placement shall be carried on at such a rate that the formation of cold joints will be prevented."

- 8. Contractor submitted technical questions and responses submitted in accordance with the terms and conditions of the solicitation are hereby made a part of this amendment. Only those questions for which responses have been received are hereby attached.
- 9. The Bid Opening date is hereby changed to 24 September 2002 at 4:00 p.m. local time.
- 10. This Amendment MUST be acknowledged as indicated in Item No. 11.

TITLE AND LOCATION

CONTRACTOR

CONTRACT NO.

MULTI-PURPOSE DIGITAL TRAINING RANGE, FT. KNOX, KY		CONTRAC	IOR														
		G	CONTRACTOR: SCHEDULE DATES		CONTRACTOR ACTION			APF	ROVING AU	THOR	RITY						
TRANSMITTAL NO	<b>%РШС %ШСТ</b>	DESCRIPTION ITEM SUBMITTED	P A R A G R A P H	OVT OR A/E REVWR	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACT-OZ CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACT-OZ CODE	DATE OF ACTION	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS	
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		Local Agency Check															
		Aggregate Sources	1.25														
		Notice of Soil Treatment	1.33														
		Progress Photographs	1.39														
_		Waste Test Results Manifest															
		Site Plan															
		Dirt and Dust Control Plan															
		Construction and Demolition	1.59	G													
		(C&D) Waste Management Plan															
		SD-07 Certificates															
		Warranties	1.20														
		Insurance	1.41	G													
		DA Form 3337	1.48	G													
		SD-11 Closeout Submittals															
		As-Built Drawings	1.8.1	G													
	TRANSMITTAL NO (b)	TI-PURPOS  T R A N S P E C S E C T  T T A L NO	TI-PURPOSE DIGITAL TRAINING RANGE, FT.  TRAANSS S S S S S S S S S S S S S S S S S	TI-PURPOSE DIGITAL TRAINING RANGE, FT. KNOX, KY  TRAANS SM S	TI-PURPOSE DIGITAL TRAINING RANGE, FT. KNOX, KY	Title	T-PURPOSE DIGITAL TRAINING RANGE, FT. KNOX, KY	CONTRACTOR									

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MULTI-PURPOSE DIGITAL TRAINING RANGE, FT. KNOX, KY CONTRACTOR: CONTRACTOR APPROVING AUTHORITY SCHEDULE DATES ACTION G 0 V Т R 0 Α A C T Ν S R Α C S S С M T S Τ Α Р F T Α V Ε R Ε 0 0 MAILED DATE FWD Т С TO APPR Α С TO T Y G # R CONTR/ A L AUTH/ S R E Τ Ε Α ٧ DESCRIPTION APPROVAL MATERIAL 0 DATE DATE RCD DATE FWD DATE RCD 0 DATE DATE RCD Ρ W Ν Ν С 0 NEEDED NEEDED D FROM TO OTHER FROM OTH OF RM APPR O O ITEM SUBMITTED R SUBMIT Ε **ACTION** CONTR REVIEWER REVIEWER ACTION AUTH REMARKS Ν BY BY (b) (c) (d) (e) (f) (i) (j) (I) (o) (a) (g) (h) (k) (m) (n) (p) (q) (r) 00800 Mechanical Room Layout 1.52 G 01330 SD-01 Preconstruction Submittals Submittal register 1.5.1 lG SD-01 Preconstruction Submittals 01355 **Environmental Protection Plan** 1.7 G RE 01356A SD-07 Certificates Mill Certificate or Affidavit 2.1.3 Ю 02130 SD-05 Design Data Storm Water General Permit Ю **Contractor Inspectors** 02220a SD-03 Product Data **PCB Transformers** G RE Manifests G RE G RE Work Plan SD-06 Test Reports **Test Reports** G 02230a SD-07 Certificates Materials Other Than Salable 3.5.2 G RE Timber SD-08 Manufacturer's Instructions Personnel Qualifications G RE 02300a SD-03 Product Data Earthwork

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TITLE AND LOCATION

CONTRACT NO.

MULTI-PURPOSE DIGITAL TRAINING RANGE, FT. KNOX, KY CONTRACTOR: CONTRACTOR APPROVING AUTHORITY SCHEDULE DATES ACTION G 0 V Т R 0 Α A C T Ν S R Α C S S С M T S Τ Α Р F T Α V Е R E 0 0 MAILED DATE FWD Т С TO APPR Α С TO T Y G # R CONTR/ A L AUTH/ S R Ε Τ Ε Α ٧ DESCRIPTION APPROVAL MATERIAL 0 DATE DATE RCD DATE FWD DATE RCD 0 DATE DATE RCD Ρ Ν Ν С 0 W NEEDED NEEDED D FROM TO OTHER FROM OTH RM APPR O O ITEM SUBMITTED R SUBMIT Ε ACTION CONTR REVIEWER REVIEWER ACTION AUTH REMARKS Ν BY BY (b) (c) (d) (e) (f) (i) (j) (k) (I) (o) (a) (g) (h) (m) (n) (p) (q) (r) 16410A SD-07 Certificates Equipment 1.3.1 Material 1.3.1 lG G Switching Equipment SD-10 Operation and Maintenance Data Switching Equipment G 3.2 G Instructions 16415A SD-02 Shop Drawings Interior Electrical Equipment G RE SD-03 Product Data Manufacturer's Catalog G RE Material, Equipment, and Fixture Lists As-Built Drawings 1.2.6 G RE Onsite Tests G RE SD-06 Test Reports G RE **Factory Test Reports** Field Test Plan G RE Field Test Reports 3.16 G RE SD-07 Certificates Materials and Equipment 1.4 G RE 16710A SD-02 Shop Drawings 1.7 G Premises Distribution System **Record Drawings** G SD-03 Product Data

CONTRACTOR

TITLE AND LOCATION

CONTRACT NO.

MULTI-PURPOSE DIGITAL TRAINING RANGE, FT. KNOX, KY CONTRACTOR: SCHEDULE DATES CONTRACTOR APPROVING AUTHORITY ACTION G 0 V Т R 0 Α A C T Ν S R Α S C S С M T S Τ Α Р Α F T V Е R Ε 0 0 MAILED DATE FWD T Y Т С TO APPR Α С TO G # R CONTR/ A L AUTH/ S R Ε Τ Ε Α ٧ DATE RCD DATE FWD DATE RCD DATE RCD DESCRIPTION APPROVAL MATERIAL 0 DATE 0 DATE Ρ W TO OTHER FROM OTH Ν Ν C T 0 NEEDED NEEDED D FROM OF RM APPR 0 O ITEM SUBMITTED R SUBMIT Ε **ACTION** CONTR REVIEWER REVIEWER ACTION AUTH REMARKS Ν BY BY (a) (b) (c) (d) (e) (f) (i) (j) (k) (I) (o) (g) (h) (m) (n) (p) (q) (r) 16710A Record Keeping and 1.8 G Documentation Spare Parts G G Manufacturer's Recommendations Test Plan G G Qualifications SD-06 Test Reports **Test Reports** F10. SD-07 Certificates Premises Distribution System 1.7 G Materials and Equipment 2.1 F10, Installers G 16711A SD-02 Shop Drawings Telephone System G Installation G **Record Drawings** G SD-03 Product Data Spare Parts F10, Equipment 1.5.2 3.1 Installation 3.5 G Acceptance Tests G Cutover and Records 3.4 SD-06 Test Reports

**SUBMITTAL REGISTER** 

CONTRACTOR

TITLE AND LOCATION

CONTRACT NO.

MULTI-PURPOSE DIGITAL TRAINING RANGE, FT. KNOX, KY CONTRACTOR: SCHEDULE DATES CONTRACTOR APPROVING AUTHORITY ACTION G 0 V Т R 0 Α A C T Ν S R Α Š C S С M T T S Α Р Α F T V Е R Ε 0 0 MAILED DATE FWD T Y Т С TO APPR Α С TO G # R CONTR/ A L AUTH/ S R E Τ Ε Α ٧ DATE RCD DATE FWD DATE RCD DATE RCD DESCRIPTION APPROVAL MATERIAL 0 DATE 0 DATE Ρ W D TO OTHER FROM OTH Ν Ν C T 0 NEEDED NEEDED FROM OF RM APPR 0 O ITEM SUBMITTED R SUBMIT E **ACTION** CONTR REVIEWER REVIEWER ACTION AUTH REMARKS Ν BY BY (a) (b) (c) (d) (e) (f) (i) (j) (k) (I) (o) (g) (h) (m) (n) (p) (q) (r) 16711A Acceptance Tests 3.5 F10. SD-07 Certificates Telephone System Qualifications G 1.4 16768A SD-02 Shop Drawings Fiber Optic System G G Installation 3.1 SD-03 Product Data G Fiber Optic System Spare Parts Manufacturer's Instructions 3.1 G Test Procedures and reports G SD-06 Test Reports Test Procedures and Reports G SD-07 Certificates Fiber Optic System G SD-10 Operation and Maintenance Data System Maintenance Course G

## Amdt. #0003

GENERAL DECISION KY020027 09/13/02 KY27 General Decision Number KY020027

Superseded General Decision No. KY010027

State: Kentucky

Construction Type:

HEAVY HIGHWAY

County(ies):

ANDERSON MERCER GALLATIN BATH GRANT MONTGOMERY GRAYSON NELSON BOURBON BOYD GREENUP NICHOLAS BOYLE HARDIN OLDHAM BRACKEN HARRISON OWEN BRECKINRIDGE HENRY ROBERTSON JEFFERSON ROWAN BULLITT JESSAMINE CARROLL SCOTT CARTER LARUE SHELBY CLARK LEWIS SPENCER ELLIOTT MADISON TRIMBLE FAYETTE MARION WASHINGTON FLEMING MASON WOODFORD FRANKLIN MEADE

Heavy and Highway Construction Projects

Modification Number	Publication Date
0	03/01/2002
1	04/05/2002
2	05/03/2002
3	06/21/2002
4	07/05/2002
5	08/16/2002
6	09/13/2002

# COUNTY(ies):

ANDERSON GALLATIN MERCER BATH GRANT MONTGOMERY BOURBON GRAYSON NELSON BOYD GREENUP NICHOLAS BOYLE HARDIN OLDHAM BRACKEN HARRISON OWEN BRECKINRIDGE HENRY ROBERTSON BULLITT **JEFFERSON** ROWAN CARROLL **JESSAMINE** SCOTT LARUE CARTER SHELBY CLARK LEWIS SPENCER ELLIOTT MADISON TRIMBLE FAYETTE MARION WASHINGTON FLEMING MASON WOODFORD

FRANKLIN MEADE

BRIN0004D 04/01/2002

Rates Fringes

BRECKINRIDGE COUNTY:

BRICKLAYERS 24.15 6.55

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BRKY0001G 06/01/2001

Rates Fringes

BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER & TRIMBLE COUNTIES:

BRICKLAYERS 20.00 5.43

BRKY0002F 06/01/2002

Rates Fringes

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

BRICKLAYERS 22.96 7.39

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BRKY0007D 06/01/2001

Rates Fringes

BOYD, CARTER, ELLIOTT, FLEMING, GREENUP, LEWIS & ROWAN COUNTIES:

BRICKLAYERS 23.04 8.32

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BRKY0017D 06/01/2001

Rates Fringes

ANDERSON, BATH, BOURBON, BOYLE, CLARK, FAYETTE, FRANKLIN, HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS,

OWEN, SCOTT, WASHINGTON & WOODFORD COUNTIES:

 BRICKLAYERS
 18.75
 5.55

 LAYOUT MEN
 19.00
 5.55

 REFRACTORY/ACID BRICK/GLASS
 19.25
 5.55

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CARP0064A 07/01/2002

 CARPENTERS
 21.45
 6.13

 PILEDRIVERMEN
 21.70
 6.13

 DIVERS
 32.55
 6.13

CARP1031P 06/01/2002

Rates Fringes

ANDERSON, BATH, BOURBON, BOYLE, CLARK, FAYETTE, FRANKLIN, HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS, OWEN, SCOTT & WOODFORD COUNTIES:

MILLWRIGHTS	19.50	9.53
CARP1031Q 06/01/2002	Dahar	Tuin
BOYD, CARTER, ELLIOTT, FLEMING, & ROWAN COUNTIES:		Fringes MASON, ROBERTSON
MILLWRIGHTS	20.79	14.04
CARP1031R 06/01/2002  BRECKINRIDGE, BULLITT, CARROLL,		Fringes N. HARDIN, HENRY,
JEFFERSON, LARUE, MARION, MEADE SPENCER, TRIMBLE & WASHINGTON O	E, NELSON, OLDHAM	
MILLWRIGHTS	22.25	10.30
CARP1066D 09/01/1999  BRACKEN & GRANT COUNTIES:	Rates	Fringes
MILLWRIGHTS	21.90	7.92
ELEC0212H 05/28/2001	Dobog	Eningo
BRACKEN, GALLATIN & GRANT COUNTI	Rates IES:	Fringes
ELECTRICIANS	23.53	7.20
ELEC0212Q 11/01/2000		
BRACKEN, GALLATIN & GRANT COUNTI	Rates EES:	Fringes
SOUND COMMUNICATIONS: Installer Cable Puller	9.00	3.475 2.64
ELEC0317L 05/30/2001	Rates	Fringes
BOYD, CARTER, ELLIOTT & ROWAN CO	DUNTIES:	
ELECTRICIANS: Electricians Cable Splicers		11.04 11.08
ELEC0369J 06/01/2001	Rates	Fringes

ANDERSON, BATH, BOURBON, BOYLE, BRECKINRIDGE, BULLITT, CARROLL, CLARK, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HARRISON, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, MONTGOMERY, NELSON, NICHOLAS, OLDHAM, OWEN, ROBERTSON, SCOTT, SHELBY, SPENCER, TRIMBLE, WASHINGTON & WOODFORD COUNTIES:

ELECTRICIANS	23.50	7.73
ELEC0575B 05/29/2002 FLEMING, GREENUP, LEWIS & MASON COU	Rates	Fringes
ELECTRICIANS	26.50	7.325
ENGIO181Y 01/01/2002	Rates	Fringes
POWER EQUIPMENT OPERATORS:  GROUP 1  GROUP 2  GROUP 3  GROUP 4	20.85 18.43 18.81 18.17	8.40 8.40 8.40 8.40

#### POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Bituminous Transfer Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Carry Deck Crane; Central Compressor Plant; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Dredge Operator; Dredge Engineer; Elevating Grader & Loaders; Grade-All; Gurries; Heavy Equipment Robotics Operator/Mechanic; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Horizontal Directional Drill Operator; Hydrocrane;

Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic; Mechanically Operated Laser Screed; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type);

Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Conrete Pump; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

- GROUP 3 Greaser on Grease Facilities servicing Heavy Equipment
- GROUP 4 Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES WITH BOOMS 150 ft. & Over (Including JIB) \$.50 Premium

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

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## \* IRON0044I 06/01/2002

Rates Fringes

BOURBON (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan);

CARROLL (Eastern third, including the Township of Ghent);

FLEMING (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford);

MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg,

Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);

NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);

OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);

SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall) &

BRACKEN, GALLATIN, GRANT, HARRISON & ROBERTSON COUNTIES:

IRONWORKERS:

Structural	23.45	10.88
Fence Erector	21.11	10.88

#### IRON0070J 06/01/2002

Rates Fringes
BOURBON (Southern two-thirds, including Townships of Austerlity,
Centerville, Clintonville, Elizabeth, Hutchison, Littlerock,
North Middletown & Paris);

- CARROLL (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville);
- CLARK (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte);
- OWEN (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill);
- SCOTT (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stampling Ground & Woodlake);
- ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE, WASHINGTON & WOODFORD COUNTIES:

IRONWORKERS 23.25 10.87

IRON0372F 06/01/2002

Rates Fringes

BOURBON (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan);

- CARROLL (Eastern third, including the Township of Ghent);
- FLEMING (Western part, Excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford);
- MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);
- NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);
- OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);

SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall);

BRACKEN, GALLATIN, GRANT, HARRISON & ROBERTSON COUNTIES:

#### IRONWORKERS, Reinforcing:

Up to & including 30-mile radius

of Hamilton County, Ohio
Courthouse 22.71 10.47

Beyond 30-mile radius of Hamilton
County, Ohio Courthouse 22.96 10.47

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#### IRON0769G 06/01/2002

Rates Fringes
CLARK (Eastern third, including Townships of Bloomingdale, Hunt,
Indian Fields, Kiddville, Loglick, Rightangele & Thomson);

FLEMING (Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford);

MASON (Eastern third, including Townships of Helena, Marshall, Orangeburg, Plumville & Springdale);

NICHOLAS (Eastern eighth, including the Township of Moorefield Sprout);

BATH, BOYD, CARTER, ELLIOTT, GREENUP, LEWIS, MONTGOMERY & ROWAN COUNTIES:

#### IRONWORKERS:

ZONE 1	24.92	11.14
ZONE 2	25.32	11.14
ZONE 3	27.32	11.14

ZONE 1 - Up to 10 mi. radius of union hall, Ashland, Ky., 1643 Greenup Avenue

ZONE 2 - 10 to 50 mi. radius of union hall;

ZONE 3 - 50 mi. radius and beyond

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#### LABO0189C 07/01/2002

	Rates	Fringe
LABORERS:		
GROUP 1	16.34	7.38
GROUP 2	16.59	7.38
GROUP 3	16.64	7.38
GROUP 4	17.24	7.38

LABORERS CLASSIFICATIONS

- GROUP 1 Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental Nuclear, Radiation, Toxic & Hazardous Waste Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; & Wrecking of Concrete Form
- GROUP 2 Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Burner & Welder; Bushammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental Nuclear, Radiation, Toxic & Hazardous Waste Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; & Wagon Driller
- GROUP 3 Air Track Driller; Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Powderman & Blaster; Side Rail Setter; Rail Paved Ditch; Screw Operator; Tunnel (Free Air); & Water Blaster
- GROUP 4 Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste -Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air)

## PAIN0012F 06/01/2001

Rates Fringes
BATH, BOURBON, BOYLE, CLARK, FAYETTE, FLEMING, FRANKLIN,
HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS,
ROBERTSON, SCOTT & WOODFORD COUNTIES:

#### PAINTERS:

<pre>Brush; Roll; Spray; Sandblasting; Steam Cleaning; Steeplejack Work;</pre>		
Lead Abatement; & Coal Tar	16.81	2.60
Bridge/Equipment Tender and/or Containment Builder	17.96	2.60
Swing & Scaffold Bridges; Structural Steel; Open Acid Tanks; High Tension Electrical Equipment; &		
Hot Pipes	21.00	2.60

PAIN0012T 06/09/2001

	Rates	
BRACKEN, GALLATIN, GRANT, MASON &	OWEN COUNTIES	:
PAINTERS: Elevated Tanks	22.05	4.70
(HEAVY & HIGHWAY BRIDGES - GUARDE STRIPING):	AILS-LIGHTPOLE	S-
Bridge/Equipment Tender and/or		
Containment Builder	18.74	4.70
Brush & Roller	21.05	4.70
Spray	21.55	4.70
Sandblasting & Hopper Tender;		
Water Blasting	21.80	4.70
Bridges when highest point of		
clearance is 60 feet or more; &		
Lead Abatement Projects	22.05	4.70
Sandblasting, Hopper Tender,		
Waterblasting (Bridges when		
highest point of clearance is		
60 feet or more)	22.80	4.70
PAIN0118D 05/01/2002		
PAINU110D 03/01/2002	Patos	Fringes
ANDERSON, BRECKINRIDGE, BULLITT,		<del>-</del>
JEFFERSON, LARUE, MARION, MEADE,		
SPENCER, TRIMBLE & WASHINGTON CO		M, SHEEDI,
BIBNOBK, IKINBBE & WIBHINGTON CO	,0111110	
PAINTERS:		
Brush	17.02	5.92
Abrasive Blaster; Fireproofing;		
Lead Abatement; Spray; &		
Waterblasting 4000 PSI and Abov	re 17.52	5.92
PAIN1072D 06/01/2001		
		Fringes
BOYD, CARTER, ELLIOTT, GREENUP, I	EWIS & ROWAN C	OUNTIES:
PAINTERS:		
Bridges	22 71	7.31
All Other Work		7.31
PLUM0107F 08/01/2001		
	Rates	Fringes
BRECKINRIDGE, BULLITT, CARROLL (W	Mestern Half),	FRANKLIN (Western
three-fourths), GRAYSON, HARDIN,	HENRY, JEFFER	SON, LARUE,
MARION, MEADE, NELSON, OLDHAM, S	SHELBY, SPENCER	, TRIMBLE &
WASHINGTON COUNTIES:		
PLUMBERS; GAS FITTERS:		
Plumbing contracts less than		
\$150,000.00	19.17	5.97
All Other Plumbing contracts	24.15	5.97

PLUM0248C 06/01/2002

Rates Fringes

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS & ROWAN COUNTIES:

PLUMBERS & STEAMFITTERS 22.97 12.40

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PLUM0392H 06/01/2001

Rates Fringes

BRACKEN, CARROLL (Eastern Half), GALLATIN, GRANT, MASON, OWEN & ROBERTSON COUNTIES:

PIPEFITTERS & PLUMBERS 25.50 7.53

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PLUM0452C 11/01/2001

Rates Fringes
ANDERSON, BATH, BOURBON, BOYLE, CLARK, FAYETTE, FLEMING,
FRANKLIN (Eastern one-fourth), HARRISON, JESSAMINE, MADISON,

MERCER, MONTGOMERY, NICHOLAS, SCOTT & WOODFORD COUNTIES:

#### PIPEFITTERS & PLUMBERS:

Projects over 1 1/2 million dollars in piping contracts:

ZONE 1 22.15 6.8

ZONE 1 22.15 6.87 ZONE 2 23.15 6.87

Projects under 1 1/2 million dollars in piping contracts: ZONE 1 18.77 6.87 ZONE 2 19.77 6.87

ZONE 1 - Within 25 mile radius of Fayette County Courthouse ZONE 2 - Beyond 25 mile radius of Fayette County Courthouse

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# \* PLUM0522D 08/01/2002

Rates Fringes

BRECKINRIDGE, BULLITT, CARROLL (Western Half), FRANKLIN (Western three-fourths), GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES:

PIPEFITTERS & STEAMFITTERS 25.90 8.98

SUKY2003A 10/08/2001

	Rates	F'rınges
TRUCK DRIVERS:		
GROUP 1	16.57	7.34
GROUP 2	16.68	7.34
GROUP 3	16.86	7.34
GROUP 4	16.96	7.34

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

- GROUP 2 Greaser; Tire Changer; & Mechanic Tender
- GROUP 3 Single Axle Dump; Flatbed; Semi-trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic
- GROUP 4 Euclid & Other Heavy Earthmoving Equipment & Lowboy; Articulator Cat; 5-Axle Vehicle; Winch & A-Frame when used in transporting materials; Ross Carrier; Forklift when used to transport building materials; & Pavement Breaker

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

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In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can

be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U. S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final. END OF GENERAL DECISION

## SECTION TABLE OF CONTENTS

## DIVISION 01 - GENERAL REQUIREMENTS

#### SECTION 01355

# ENVIRONMENTAL PROTECTION

#### AMENDMENT NO. 3

PART	1	GENERAL.

- 1.1 REFERENCES
- 1.2 DEFINITIONS
  - 1.2.1 Environmental Pollution and Damage 1.2.2 Environmental Protection

  - 1.2.3 Contractor Generated Hazardous Waste
  - 1.2.4 Land Application for Discharge Water
  - 1.2.5 Pesticide
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# SECTION 01355

# ENVIRONMENTAL PROTECTION AMENDMENT NO. 3

# PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. ARMY (DA)

AR 200-5 Pest Management

# U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 328	Definitions
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 152 - 186	Pesticide Programs
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 279	Standards for the Management of Used Oil
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 355	Emergency Planning and Notification
49 CFR 171 - 178	Hazardous Materials Regulations

# U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(1996) U.S. Army Corps on Engineers Safety and Health Requirements Manual
WETLAND MANUAL	Corps of Engineers Wetlands Delineation Manual Technical Report Y-87-1

#### 1.2 DEFINITIONS

# 1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

## 1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

## 1.2.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e. methyl ethyl ketone, toluene etc.), waste thinners, excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water.

# 1.2.4 Land Application for Discharge Water

The term "Land Application" for discharge water implies that the Contractor shall discharge water at a rate which allows the water to percolate into the soil. No sheeting action, soil erosion, discharge into storm sewers, discharge into defined drainage areas, or discharge into the "waters of the United States" shall occur. Land Application shall be in compliance with all applicable Federal, State, and local laws and regulations.

#### 1.2.5 Pesticide

Pesticide is defined as any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant or desiccant.

#### 1.2.6 Pests

The term "pests" means arthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds and other organisms (except for human or animal disease-causing organisms) that adversely affect readiness, military operations, or the well-being of personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

# 1.2.7 Surface Discharge

The term "Surface Discharge" implies that the water is discharged with

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possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers, creeks, and/or "waters of the United States" and would require a permit to discharge water from the governing agency.

## 1.2.8 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

## 1.2.9 Wetlands

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and bogs. Official determination of whether or not an area is classified as a wetland must be done in accordance with WETLAND MANUAL.

## 1.3 GENERAL REQUIREMENTS

The Contractor shall minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. The Contractor shall comply with all applicable environmental Federal, State, and local laws and regulations. The Contractor shall be responsible for any delays resulting from failure to comply with environmental laws and regulations.

#### 1.4 SUBCONTRACTORS

The Contractor shall ensure compliance with this section by subcontractors.

#### 1.5 PAYMENT

No separate payment will be made for work covered under this section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor. All costs associated with this section shall be included in the contract price. The Contractor shall be responsible for payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations.

#### 1.6 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

#### SD-01 Preconstruction Submittals

Environmental Protection Plan; G, RE

The environmental protection plan.

#### 1.7 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing construction activities or delivery of materials to the site, the Contractor shall submit an Environmental Protection Plan for review and approval by the Contracting Officer. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern shall be defined within the Environmental Protection Plan as outlined in this section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, the Contractor shall meet with the Contracting Officer for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plans. The Environmental Protection Plan shall be current and maintained onsite by the Contractor.

#### 1.7.1 Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

#### 1.7.2 Contents

The environmental protection plan shall include, but shall not be limited to, the following:

- a. Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring adherence to the Environmental Protection Plan.
- b. Name(s) and qualifications of person(s) responsible for manifesting hazardous waste to be removed from the site, if applicable.
- c. Name(s) and qualifications of person(s) responsible for training the Contractor's environmental protection personnel.
- d. Description of the Contractor's environmental protection personnel training program.
- e. An erosion and sediment control plan which identifies the type and location of the erosion and sediment controls to be provided. The plan shall include monitoring and reporting requirements to assure that the control measures are in compliance with the erosion and sediment control plan, Federal, State, and local laws and regulations. A Storm Water/Ground Water Pollution Prevention Plan (SWGWPPP) may be substituted for this plan.
- f. Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil

materials including methods to control runoff and to contain materials on the site.

- g. Traffic control plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. Plan shall include measures to minimize the amount of mud transported onto paved public roads by vehicles or runoff.
- h. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas.
- i. Drawing showing the location of borrow areas. Protection measures required at the work site shall apply to the borrow areas including final restoration for subsequent benefical use of the land.
- j. The Spill Control plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations. The Spill Control Plan supplements the requirements of EM 385-1-1 and the Ft. Knox, Kentucky Spill Prevention Control and Counter Measures Plan (SPCC) and Installation Spill Contingency Plan (ISCP). This plan shall include as a minimum:
  - 1. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer and the Environmental Management Division, Directorate of Base Operation Support in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity is released to the environment. The plan shall contain a list of the required reporting channels and telephone numbers.
  - 2. The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.
  - 3. Training requirements for Contractor's personnel and methods of accomplishing the training.
  - 4. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.
  - 5. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.
  - 6. The methods and procedures to be used for expeditious contaminant cleanup.

The Spill Control Plan must be completed prior to construction and submitted to Environmental Management Division, Directorate of Base Operations Support.

- k. A non-hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris. The plan shall include schedules for disposal. The Contractor shall identify any subcontractors responsible for the transportation and disposal of solid waste. Licenses or permits shall be submitted for solid waste disposal sites that are not a commercial operating facility. Evidence of the disposal facility's acceptance of the solid waste shall be attached to this plan during the construction. The Contractor shall attach a copy of each of the Non-hazardous Solid Waste Diversion Reports to the disposal plan. The report shall be submitted on the first working day after the first quarter that non-hazardous solid waste has been disposed and/or diverted and shall be for the previous quarter (e.g. the first working day of January, April, July, and October). The report shall indicate the total amount of waste generated and total amount of waste diverted in cubic yards or tons along with the percent that was diverted.
- 1. A recycling and solid waste minimization plan with a list of measures to reduce consumption of energy and natural resources; for example, the possibility to shred fallen trees and use them as mulch shall be considered as an alterative to burning or burial. The plan shall detail the Contractor's actions to comply with and to participate in Federal, State, Regional, and local government sponsored recycling programs to reduce the volume of solid waste at the source.
- m. An air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc., do not become air borne and travel off the project site.
- n. A contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. In accordance with EM 385-1-1, a copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be on site at any given time shall be included in the contaminant prevention plan. As new hazardous materials are brought on site or removed from the site, the plan shall be updated.
- o. A waste water management plan that identifies the methods and procedures for management and/or discharge of waste waters which are directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of ground water, disinfection water, hydrostatic test water, and water used in flushing of lines. If a settling/retention pond is required, the plan shall include the design of the pond including drawings, removal plan, and testing requirements for possible pollutants. If land application will be the method of disposal for the waste water, the plan shall include a sketch showing the location for land application along with a description of the pretreatment methods to be implemented. If surface discharge will be the method of disposal, a copy of the permit and associated documents shall be included as an attachment prior to discharging the waste water. If disposal is to a sanitary sewer, the plan shall include documentation that the Waste Water Treatment Plant Operator has approved the flow rate, volume, and type of discharge.
- p. A historical, archaeological, cultural resources biological resources and wetlands plan that defines procedures for identifying and

protecting historical, archaeological, cultural resources, biological resources and wetlands known to be on the project site: and/or identifies procedures to be followed if historical archaeological, cultural resources, biological resources and wetlands not previously known to be onsite or in the area are discovered during construction. The plan shall include methods to assure the protection of known or discovered resources and shall identify lines of communication between Contractor personnel and the Contracting Officer. Prior to construction all jurisdictional wetlands shown on drawings shall be marked using orange fencing or similar means to prevent accidental disturbance of area by construction equipment.

q. A pesticide treatment plan shall be included and updated, as information becomes available. The plan shall include: sequence of treatment, dates, times, locations, pesticide trade name, EPA registration numbers, authorized uses, chemical composition, formulation, original and applied concentration, application rates of active ingredient (i.e. pounds of active ingredient applied), equipment used for application and calibration of equipment. The Contractor is responsible for Federal, State, Regional and Local pest management record keeping and reporting requirements as well as any additional Installation Project Office specific requirements. The Contractor shall follow AR 200-5 Pest Management, Chapter 2, Section III "Pest Management Records and Reports" for data required to be reported to the Installation.

# 1.7.3 Appendix

Copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents shall be attached, as an appendix, to the Environmental Protection Plan.

## 1.8 PROTECTION FEATURES

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to start of any onsite construction activities, the Contractor and the Contracting Officer shall make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report shall be signed by both the the Contractor and the Contracting Officer upon mutual agreement as to its accuracy and completeness. The Contractor shall protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the Contractor's work under the contract.

# 1.9 SPECIAL ENVIRONMENTAL REQUIREMENTS

The Contractor shall comply with the special environmental requirements listed here and included at the end of this section.

## 1.10 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the drawings, plans and specifications which may have an environmental impact will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

#### 1.11 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

#### 1.12 LITIGATION

If work is suspended, delayed, or interrupted due to a court order of competent jurisdiction, the Contracting Officer will determine whether the order is due in any part to the acts or omissions of the Contractor, or subcontractors at any tier, not required by the terms of the contract. If it is determined that the order is not due to Contractor's failing, such suspension, delay, or interruption shall be considered as ordered by the Contracting Officer in the administration of the contract under the contract clause SUSPENSION OF WORK.

# PART 2 PRODUCTS (NOT USED)

## PART 3 EXECUTION

# 3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

The Contractor shall obtain all needed permits or licenses except EMD, DBOS will apply for the 404 and 401 permits/Wetland Mitigation permit and the permit for temproary draw-down of the water levels in the lakes. See Contract Clause PERMITS AND RESPONSIBILITIES. The State department of natural resource, through the national polutant discharge elemination system (NPDES), requires general permits, a notice of intent, and a notice of discontinuation. The Contractor shall be responsible for implementing the terms and requirements of the appropriate permits as needed and for payment of all fees.

#### 3.2 LAND RESOURCES

The Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction, the Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or

attached to any trees for anchorage unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Stone, soil, or other materials displaced into uncleared areas shall be removed by the Contractor.

#### 3.2.1 Work Area Limits

Prior to commencing construction activities, the Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area which are not to be disturbed shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, any markers shall be visible in the dark. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

## 3.2.2 Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the drawings to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques. The Contractor shall restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

#### 3.2.3 Erosion and Sediment Controls

The Contractor shall be responsible for providing erosion and sediment control measures in accordance with Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of the Contractor's construction activities. The area of bare soil exposed at any one time by construction operations should be kept to a minimum. The Contractor shall construct or install temporary and permanent erosion and sediment control best management practices (BMPs) as specified in Section 02130 KPDES PERMIT FOR CONSTRUCTION. BMPs may include, but not be limited to, vegetation cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins. Any temporary measures shall be removed after the area has been stabilized.

#### 3.2.4 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only when approved. Erosion and sediment controls shall be provided for on-site borrow and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas.

## 3.3 WATER RESOURCES

The Contractor shall monitor construction activities to prevent pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation without prior written approval of the

Contracting Officer. Toxic or hazardous chemicals shall not be applied to soil or vegetation when such application may cause contamination of the fresh water reserve. All water areas affected by construction activities shall be monitored by the Contractor. For construction activities immediately adjacent to impaired surface waters, the Contractor shall be capable of quantifying sediment or pollutant loading to that surface water when required by State or Federally issued Clean Water Act permits.

# 3.3.1 Cofferdams, Diversions, and Dewatering Operations

Construction operations for dewatering, removal of cofferdams, tailrace excavation, and tunnel closure shall be controlled at all times to maintain compliance with existing State water quality standards and designated uses of the surface water body.

# 3.3.2 Stream Crossings

Stream crossings shall allow movement of materials or equipment without violating water pollution control standards of the Federal, State, and local governments. Construction of stream crossing structures shall be in compliance with Clean Water Act Section 404, Nation Wide Permit No. USACE ID Number: 1999-00332-FJD.

#### 3.3.3 Wetlands

The Contractor shall not enter, disturb, destroy, or allow discharge of contaminants into any wetlands except as authorized herein. The Contractor shall be responsible for the protection of wetlands shown on the drawings in accordance with paragraph ENVIRONMENTAL PERMITS, REVIEWS, AND APPROVALS. Authorization to enter specific wetlands identified shall not relieve the Contractor from any obligation to protect other wetlands within, adjacent to, or in the vicinity of the construction site and associated boundaries.

## 3.3.3.1 Wetland Marking and Identification

Prior to construction all wetlands would be marked with orange fencing or similar means to prevent accidental disturbance of the area by the construction equipment. Wetlands will be marked in the field with wooden stakes and identified on the drawings. To identify cleared wetland and streams (20 feet on each side) after range construction, the perimeter of these systems will be marked using SIBER Stakes or SEIBERT Stakes as defined below.

- a. <u>Siber Stakes</u>: Siber stakes consist of a a metal roadway signpost with a PVC cylinder at least 16 inches in length, marked with reflective tape 5 stripes in red, yellow and white. It shall also contain a gold-colored thermal tape wrapped around its top end as part of a thermal imagining system. The standard has been established by the Range and Land Team at the Army Training Support Center. Sieber stakes can be purchased through the Army Environmental Resource Center, Huntsville, Alabama.
- b. <u>Seibert Stakes</u>: The stakes marked with 5 reflective bands and one non-reflective stripe on the back. The top band is 6" wide. The next four bands, continuing down, are a 3" red band, a 2" yellow band, a 3" red band and a 2" yellow band to make 16 inches. The back of each stake contains a black (non-reflective) stripe approximately 1" wide and running the full length of the stake.

The Seibert Stake is constructed of Nonmetallic Conduit Aboveground and Underground PVC type material with an inside diameter not less than 2" and an outside diameter of not more than 2-3/8". Each stake is 16" long. Reflective tape is a high intensity grade reflective pressure sensitive sheeting. Seibert Stakes are attached to metal engineer stakes using two non-rusting heavy duty hose clamps capable of adjustments from 2-9/16" to 3-1/2". Two hose clamp fasteners are required.

## 3.4 AIR RESOURCES

Equipment operation, activities, or processes performed by the Contractor shall be in accordance with all Federal and State air emission and performance laws and standards.

## 3.4.1 Particulates

Dust particles; aerosols and gaseous by-products from construction activities; and processing and preparation of materials, shall be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates which would cause the Federal, State, and local air pollution standards to be exceeded or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, baghouse, scrubbers, electrostatic precipitators or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. The Contractor must have sufficient, competent equipment available to accomplish these tasks. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs.

## 3.4.2 Odors

Odors from construction activities shall be controlled at all times. The odors shall not cause a health hazard and shall be in compliance with State regulations and/or local ordinances.

## 3.4.3 Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise.

## 3.4.4 Burning

Burning will not be allowed on the project site [AM#3]

The downrange area has been an impact area for many years and is reflected on the surface with craters, unexploded ordinances and metal fragments. Surface clearance will be provided by G3, Fort Knox Range Division.

## 3.5 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

Disposal of wastes shall be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

#### 3.5.1 Solid Wastes

Solid wastes (excluding clearing debris) shall be placed in containers which are emptied on a regular schedule. Handling, storage, and disposal shall be conducted to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become co-mingled with solid waste. The Contractor shall transport solid waste off Government property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal.

# 3.5.2 Chemicals and Chemical Wastes

Chemicals shall be dispensed ensuring no spillage to the ground or water. Periodic inspections of dispensing areas to identify leakage and initiate corrective action shall be performed and documented. This documentation will be periodically reviewed by the Government. Chemical waste shall be collected in corrosion resistant, compatible containers. Collection drums shall be monitored and removed to a staging or storage area when contents are within 6 inches of the top. Wastes shall be classified, managed, stored, and disposed of in accordance with Federal, State, and local laws and regulations.

## 3.5.3 Contractor Generated Hazardous Wastes/Excess Hazardous Materials

Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable State and local regulations. Hazardous materials are defined in 49 CFR 171 - 178. The Contractor shall, at a minimum, manage and store hazardous waste in compliance with 40 CFR 262 and shall manage and store hazardous waste in accordance with the Installation hazardous waste management plan. The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. The Contractor shall segregate hazardous waste from other materials and wastes, shall protect it from the weather by placing it in a safe covered location, and shall take precautionary measures such as berming or other appropriate measures against accidental spillage. The Contractor shall be responsible for storage, describing, packaging, labeling, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations. The Contractor shall transport Contractor generated hazardous waste off Government property within 60 days in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. The Contractor shall dispose of hazardous waste in compliance with Federal, State and local laws and regulations. Spills of hazardous or toxic materials shall be immediately reported to the Contracting Officer and the Facility Environmental Office. Cleanup and cleanup costs due to spills shall be the Contractor's responsibility. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility.

## 3.5.4 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. Storage of fuel on the project site shall be accordance with all Federal, State, and local laws and regulations.

#### 3.5.5 Waste Water

Disposal of waste water shall be as specified below.

- a. Waste water from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, forms, etc. shall not be allowed to enter water ways or to be discharged prior to being treated to remove pollutants. The Contractor shall dispose of the construction related waste water off-Government property in accordance with all Federal, State, Regional and Local laws and regulations or by collecting and placing it in a retention pond where suspended material can be settled out and/or the water can evaporate to separate pollutants from the water. The site for the retention pond shall be coordinated and approved with the Contracting Officer. The residue left in the pond prior to completion of the project shall be removed, tested, and disposed off-Government property in accordance with Federal, State, and local laws and regulations. The area shall be backfilled to the original grade, top-soiled and seeded/sodded.
- b. For discharge of ground water, the Contractor shall surface discharge in accordance with the requirements of the NPDES or KPDES permit.
- c. Water generated from the flushing of lines after disinfection or disinfection in conjunction with hydrostatic testing or hydrostatic testing shall be land applied in accordance with all Federal, State, and local laws and regulations for land application.

#### 3.6 RECYCLING AND WASTE MINIMIZATION

The Contractor shall participate in State and local government sponsored recycling programs. The Contractor is further encouraged to minimize solid waste generation throughout the duration of the project.

# 3.7 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Existing historical, archaeological, and cultural resources within the Contractor's work area will be so designated by the Contracting Officer if any have been identified. The Contractor shall protect these resources and shall be responsible for their preservation during the life of the Contract. If during excavation or other construction activities any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, all activities that may damage or alter such resources shall be temporarily suspended. Resources covered by this paragraph include but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, the Contractor shall immediately notify the Contracting Officer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources. The Contractor shall secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.

#### 3.8 BIOLOGICAL RESOURCES

The Contractor shall minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Contractor shall be responsible for the protection of threatened and endangered animal and plant species including their habitat in accordance with Federal, State, Regional, and local laws and regulations.

#### 3.9 INTEGRATED PEST MANAGEMENT

In order to minimize impacts to existing fauna and flora, the Contractor, through the Contracting Officer, shall coordinate with the EMD, DBOS at the earliest possible time prior to pesticide application. The Contractor shall discuss integrated pest management strategies with the EMD, DBOS and receive concurrence from the EMD, DBOS through the COR prior to the application of any pesticide associated with these specifications. Installation Project Office Pest Management personnel shall be given the opportunity to be present at all meetings concerning treatment measures for pest or disease control and during application of the pesticide. The use and management of pesticides are regulated under 40 CFR 152 - 186.

Herbicides/pesticides would be used only around structures such as buildings, targets, and bleachers and along roadways. This would be accomplished on an as needed basis. There would be no regularly scheduled spraying. Environmental Management Division would approve all herbicide/pesticide use prior to its use. All pesticides/herbicides used on the installation would be included in the Fort Knox Integrated Pest Management Plan (IPMP).

#### 3.9.1 Pesticide Delivery and Storage

Pesticides shall be delivered to the site in the original, unopened containers bearing legible labels indicating the EPA registration number and the manufacturer's registered uses. Pesticides shall be stored according to manufacturer's instructions and under lock and key when unattended.

## 3.9.2 Qualifications

For the application of pesticides, the Contractor shall use the services of a subcontractor whose principal business is pest control. The subcontractor shall be licensed and certified in the state where the work is to be performed.

# 3.9.3 Pesticide Handling Requirements

The Contractor shall formulate, treat with, and dispose of pesticides and associated containers in accordance with label directions and shall use the clothing and personal protective equipment specified on the labeling for use during all phases of the application. Material Safety Data Sheets (MSDS)shall be available for all pesticide products.

# 3.9.4 Application

Pesticides shall be applied by a State Certified Pesticide Applicator in accordance with EPA label restrictions and recommendation. The Certified Applicator shall wear clothing and personal protective equipment as specified on the pesticide label. Water used for formulating shall only come from locations designated by the Contracting Officer. The Contractor

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shall not allow the equipment to overflow. Prior to application of pesticide, all equipment shall be inspected for leaks, clogging, wear, or damage and shall be repaired prior to being used.

## 3.10 PREVIOUSLY USED EQUIPMENT

The Contractor shall clean all previously used construction equipment prior to bringing it onto the project site. The Contractor shall ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. The Contractor shall consult with the USDA jurisdictional office for additional cleaning requirements.

#### 3.11 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

#### 3.12 MILITARY MUNITIONS

In the event the Contractor discovers or uncovers military munitions as defined in 40 CFR 260, the Contractor shall immediately stop work in that area and immediately inform the Contracting Officer.

#### 3.13 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection and pollution control. The training shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; and other regulated contaminants; recognition and protection of archaeological sites, artifacts, wetlands, and endangered species and their habitat that are known to be in the area.

## 3.14 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded, filled and the entire area seeded unless otherwise indicated.

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#### SECTION 02220A

#### DEMOLITION

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SECTION 02220A

#### DEMOLITION

#### AMENDMENT NO. 3

#### PART 1 GENERAL

#### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1

(1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

## 1.2 GENERAL REQUIREMENTS

The work includes demolition, salvage of identified items and materials, and removal of resulting rubbish and debris. Rubbish and debris shall be removed from Government property daily, unless otherwise directed, to avoid accumulation at the demolition site. Materials that cannot be removed daily shall be stored in areas specified by the Contracting Officer. In the interest of occupational safety and health, the work shall be performed in accordance with EM 385-1-1, Section 23, Demolition, and other applicable Sections. In the interest of conservation, salvage shall be pursued to the maximum extent possible; salvaged items and materials shall be disposed of as specified by the Contracting Officer.

#### 1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-03 Product Data

PCB Transformers; G, RE

Submit description of PCB transformers to be removed.

Manifests; G, RE

Manifests of any PCB transformers to be transported.

Work Plan; G, RE

The procedures proposed for the accomplishment of the work. The procedures shall provide for safe conduct of the work, careful removal and disposition of materials specified to be salvaged, protection of property which is to remain undisturbed, coordination

with other work in progress, and timely disconnection of utility services. The procedures shall include a detailed description of the methods and equipment to be used for each operation, and the sequence of operations in accordance with EM 385-1-1.

SD-06 Test Reports

Test Reports; G

Results of test reports of PCB transformers.

#### 1.4 DUST CONTROL

The amount of dust resulting from demolition shall be controlled to prevent the spread of dust to occupied portions of the construction site and to avoid creation of a nuisance in the surrounding area. Use of water will not be permitted when it will result in, or create, hazardous or objectionable conditions such as ice, flooding and pollution.

#### 1.5 PROTECTION

## 1.5.1 Protection of Personnel

During the demolition work the Contractor shall continuously evaluate the condition of the structure being demolished and take immediate action to protect all personnel working in and around the demolition site. No area, section, or component of floors, roofs, walls, columns, pilasters, or other structural element will be allowed to be left standing without sufficient bracing, shoring, or lateral support to prevent collapse or failure while workmen remove debris or perform other work in the immediate area.

# 1.5.2 Protection of Existing Property

Before beginning any demolition work, the Contractor shall survey the site and examine the drawings and specifications to determine the extent of the work. The Contractor shall take necessary precautions to avoid damage to existing items to remain in place, to be reused, or to remain the property of the Government; any damaged items shall be repaired or replaced as approved by the Contracting Officer. The Contractor shall coordinate the work of this section with all other work and shall construct and maintain shoring, bracing, and supports as required. The Contractor shall ensure that structural elements are not overloaded and shall be responsible for increasing structural supports or adding new supports as may be required as a result of any cutting, removal, or demolition work performed under this contract.

#### 1.5.3 Protection From the Weather

Salvageable materials and equipment to remain shall be protected from the weather at all times.

## 1.5.4 Protection of Trees

Trees within the project site which might be damaged during demolition, and which are indicated to be left in place, shall be protected by a 6 foot high fence. The fence shall be securely erected a minimum of 5 feet from the trunk of individual trees or follow the outer perimeter of branches or clumps of trees. Any tree designated to remain that is damaged during the work under this contract shall be replaced in kind or as approved by the

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Contracting Officer.

#### 1.5.5 Environmental Protection

The work shall comply with the requirements of Section 01355 ENVIRONMENTAL PROTECTION.

#### 1.6 BURNING

The use	of	burning	at t	the	project	site	for	the	disposal	of	refuse	and
debris	wil	l [AM#3]ı	not k	oe j	permitted	i.						
[AM#3]					•							

#### 1.7 USE OF EXPLOSIVES

Use of explosives will be permitted with advance written approval from the Contracting Officer and G-3/DTM Range Division.

#### 1.8 AVAILABILITY OF WORK AREAS

Areas in which the work is to be accomplished will be available after Notice to Proceed. [AM#3]The impact area south of Wilcox Lake will be available after UXO clearance in accordance with Specification Section 00800.

PART 2 PRODUCTS (Not Applicable)

#### PART 3 EXECUTION

# 3.1 EXISTING STRUCTURES

Indicated roads shall be leveled to natural ground or elevation 452.5. Cemeteries, including markers, fencing and access, shall not be disturbed.

## 3.2 UTILITIES

Existing utilities and equipment shall be removed and disconnected as shown or indicated. When utility lines are encountered that are not indicated on the drawings, the Contracting Officer shall be notified prior to further work in that area.

#### 3.3 FILLING

Holes, open basements and other hazardous openings shall be filled in accordance with Section 02300 EARTHWORK FOR ROADWAYS, TRAILS, TARGETS, AND BERMS.

## 3.4 DISPOSITION OF MATERIAL

Title to material and equipment to be demolished, except Government salvage and historical items, is vested in the Contractor upon receipt of notice to proceed. The Government will not be responsible for the condition, loss or damage to such property after notice to proceed.

## 3.4.1 Salvageable Items and Material

Contractor shall salvage items and material to the maximum extent possible.

## 3.4.1.1 Material Salvaged for the Contractor

Material salvaged for the Contractor shall be stored as approved by the Contracting Officer and shall be removed from Government property before completion of the contract. Material salvaged for the Contractor shall not be sold on the site.

# 3.4.1.2 Items Salvaged for the Government

Salvaged items to remain the property of the Government shall be removed in a manner to prevent damage, and packed or crated to protect the items from damage while in storage or during shipment. Items damaged during removal or storage shall be repaired or replaced to match existing items. Containers shall be properly identified as to contents. The following items reserved as property of the Government shall be delivered to the areas designated: Transformers with potential PCB shall be turned into the post (DPW) central point area, munitions, ammunition residue, lighting protection, control panels, capacitor panels, power panels, and regulators.

# 3.4.1.3 Items Salvaged for the Using Service

The following items reserved as property of the using service shall be removed prior to commencement of work under this contract: Telephones located in construction area.

#### 3.4.1.4 Historical Items

Historical items shall be removed in a manner to prevent damage. The following historical items shall be delivered to the Government for disposition: Corner stones, contents of corner stones, and document boxes wherever located on the site.

# 3.4.2 Unsalvageable Material

Concrete, masonry, and other noncombustible material, except concrete permitted to remain in place, shall be disposed of in the disposal areas shown. The fill in the disposal area shall remain below elevation 452.5 and after disposal is completed, the disposal area shall be uniformly graded to drain. Combustible material shall be disposed of off the site or by burning. All fluorescent ballasts removed shall be placed in a drum furnished by DEH and transported as directed by DEH for disposal.

#### 3.5 CLEAN UP

Debris shall be removed and transported in a manner that prevents spillage on streets or adjacent areas. Local regulations regarding hauling and disposal shall apply.

# 3.6 REMOVAL OF PCB TRANSFORMER

## 3.6.1 Removal and Transportation of PCB's

The Contractor shall furnish all labor, materials, and equipment necessary to remove and transport PCB contaminated transformers and other associated materials to the DEH for disposal. The Contractor shall be responsible for testing the transformers for PCB's.

All transportation will be in accordance with 49 CRF 761, as amended,

Polychlorinated Biphenyls (PCB) Manufacturing, Processing, Distribution in Commerce and Use of Prohibitions.

# 3.6.2 Description of Transformer

A description of each transformer to include ID Number, manufacturer, voltage rating, gallons of dielectric fluid, weight, serial number, cubic feet, and PPM/PCB concentration shall be provided by the Contractor after the tests for PCB's are completed.

## 3.6.3 PCB Manifest

A manifest of all PCB items/materials transported to the DEH shall be kept by the Contractor. The manifest should consist of a description of the items being disposed of as required in Paragraph "Description of Transformer".

## 3.6.4 Spillage of PCB's

Contractor is responsible for his actions resulting in the spillage of PCB's. Responsibilities include immediate containment, cleanup and disposal as well as sampling and analysis of spill area to ensure no residual contamination remains. Disposal shall consist of transporting spillage to the DEH in sealed drums marked as to content.

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SECTION 02230a

# CLEARING AND GRUBBING

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### SECTION 02230a

# CLEARING AND GRUBBING AMENDMENT NO. 3

### PART 1 GENERAL

### 1.1 DEFINITIONS

### 1.1.1 Clearing

Clearing shall consist of the felling, trimming, and cutting of trees into sections and the satisfactory disposal of the trees and other vegetation designated for removal, including down timber, snags, brush, and rubbish occurring in the areas to be cleared as shown in the drawings and where grubbing is required by the specifications. Disposal by chipping and spreading is also acceptable.

### 1.1.2 Grubbing

Grubbing shall consist of the removal and disposal of stumps, roots larger than 3 inches in diameter, and matted roots from the designated grubbing areas.

### 1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

### SD-07 Certificates

Materials Other Than Salable Timber; G, RE.

Written permission to dispose of such products on private property shall be filed with the Contracting Officer.

# [AM#3]SD-08 Statements

# Personnel Qualifications; G, RE.

Submit resumes of ordnance personnel documenting that qualifications requirements are satisfied.

# 1.3 [AM#3]UNEXPLODED ORDNANCE (UXO) PERSONNEL

UXO personnel shall be U.S. citizens and graduates of one of the following schools or courses.

- a. U.S. Army Bomb Disposal School, Aberdeen Proving Ground, Maryland.
- b. U.S. Naval Explosive Ordnance Disposal (EOD) School, Indian Head, Maryland.

# c. EOD Assistant's Course, Redstone Arsenal, Alabama.

# d. EOD Assistant's Course, Eglin Air Force Base, Florida.

Credit for EOD experience in National Guard or Reserve Units will be based on the actual documented time spent on active duty, not on the total time of service.

### 1.4 [AM#3]UXO TECHNICAL MANAGEMENT PLAN

Detail the approach, methods, and operational UXO procedures to be employed at the construction site to include grinding operations. The plan shall describe the brand and specifications of ordnance locators to be used, ordnance detection procedures, quality control procedures for separating contaminated timber from uncontaminated timber, procedures for safety during chipping operations to undetected UXO or metal fragments, and composition and management of teams compiled of UXO personnel.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

### 3.1 CLEARING

Trees, stumps, roots, brush, and other vegetation in areas to be cleared shall be cut off flush with or below the original ground surface, except such trees and vegetation as may be indicated or directed to be left standing. Trees designated to be left standing within the cleared areas shall be trimmed of dead branches 1-1/2 inches or more in diameter and shall be trimmed of all branches the heights indicated or directed. Limbs and branches to be trimmed shall be neatly cut close to the bole of the tree or main branches. Cuts more than 1-1/2 inches in diameter shall be painted with an approved tree-wound paint. Trees and vegetation to be left standing shall be protected from damage incident to clearing, grubbing, and construction operations by the erection of barriers or by such other means as the circumstances require. All jurisdictional wetlands shown on the plans shall be marked with orange fencing or similar means to prevent accidental disturbance of wetland areas by construction equipment. Clearing shall also include the removal and disposal of structures that obtrude, encroach upon, or otherwise obstruct the work.

### 3.2 GRUBBING

Material to be grubbed, together with logs and other organic or metallic debris not suitable for foundation purposes, shall be removed to a depth of not less than 18 inches below the original surface level of the ground in areas indicated to be grubbed and in areas indicated as construction areas under this contract, such as areas for buildings, and areas to be paved. Depressions made by grubbing shall be filled with suitable material and compacted to make the surface conform with the original adjacent surface of the ground.

### 3.3 TREE AND BRUSH REMOVAL

In clearing areas where no excavation, filling or grading operations are required clearing shall consist of removing all trees to ground level and mowing the remainder of the vegetation with a suitable rotary cutter to a height of 3 inches. Non-vegetation areas shall be turfed by seeding and maintained in accordance with SECTION 02921a SEEDING.

### 3.4 HAND CLEARING WETLAND AREAS

Low areas 20 feet each side of the edge of the creek bed or typical high water line whichever is greater shall be hand-cleared of trees and maintained to a height of 3 feet. All revegetation along creek side shall be as indicated in SECTION 02921a SEEDING and SECTION 02930a EXTERIOR PLANTING.

IAW the USFWS Biological Opinion, tree removal will be accomplished during the period October 15 to March 31 (non-maternity season for Indiana Bat). If the entire area needed for the proposed upgrade can not be cleared during this period, all snags (standing dead trees) and live trees 6 inches in Diameter at Breast Height (DBH) or larger will be removed during the non-maternity season. Smaller trees and other vegetation may then be removed at any time.

Trees within the Pearl Pond area shall be removed in equal phases over two non-maternity seasons. Trees within the Pearl Pond area shall be cleared using hand tools on slopes greater than 5:1. Tree harvesters on construction mats shall be used to clear trees within the Pearl Pond area on slopes flatter than 5:1.

### 3.5 DISPOSAL OF MATERIALS

### 3.5.1 Salable Timber

All commercial forest products [AM#3] North of Wilcox Lake outside of the impact area will be removed prior to construction.

### 3.5.2 Materials Other Than Salable Timber

Logs, stumps, roots, brush, rotten wood, and other refuse from the clearing and grubbing operations, except for salable timber, shall be disposed of in the designated waste disposal area as directed by the Contracting Officer . All forest products south of Wilcox Lake inside the impact area shall be surveyed for UXO contamination according to the UXO Technical Management Plan. UXO contaminated timber shall be stockpiled around the range area as directed by the Contracting Officer. Uncontaminated timber shall be ground and distributed throughout the project site by incorporation into the topsoil and using as erosion control material to the maximum extent possible. If distribution is not practically feasible as determined by the Contracting Officer, the ground timber shall be stockpiled in a location approved by the Contracting Officer. The distribution of ground timber shall not adversely affect the requirements of EARTHWORK stipulated in specification Section 02300a. Chipping operations shall reduce the uncontaminated timber to particles less than 4 inches in any direction.

[AM#3] APPENDIX A - Prescribed Fire Plan
(Unexploded Ordnance (UXO) Surface Clearing)

FOR INFORMATION ONLY

-- End of Section --

9/6/0212:22 PM AMENDMENT NO.

# (DRAFT) APPENDIX A PRESCRIBED FIRE PLAN (UNEXPLODED ORDNANCE (UXO) SURFACE CLEARING), FORT KNOX, KY

**NOTE:** This Appendix A to Section 02230a is for the UXO surface clearing burn to be conducted by Fort Knox. The Contractor responsibilities under this burn are limited to those specified in Items 5 and 12 below.

### 1. Locations and Administrative Information:

- **a. Location:** Fort Knox, KY, (Bullitt County) is the site for the construction of the Wilcox Multi-Purpose Digital Training Range. The proposed burn site begins south of Wilcox Lake and contains approximately 950 acres. **The site is located within a known military range impact area.** The approximate location by coordinates (1,000 meter, UTM Zone 16) beginning at 063/020 thence to 070/015 to 063/003 to 056/978 to 039/985 and thence back to beginning).
- b. Funding, Acres and Cost by Benefiting Function: Approximate range impact acreage: 950 Acres.

Due to the inherent dangers associated with any activities taking place inside of a military range impact area, the G3 Range Control will be conducting the burn. The burn is being conducted so that a surface sweep of the area can be safely conducted to remove any found unexploded ordnance (UXO) prior to the land clearing operation for construction of the new Wilcox Tank Range.

c. Fiscal Year of Proposed Surface Burn: 2002/2003 (Burning must only be conducted between 1 November – 28 February).

# 2. History of Previous Burn:

The northern area of proposed project was burned in 1978 and surface cleared for a construction project. Wildfires in 1987 burned the area hard, killing most of the understory in the area. Mature trees suffered minor damage but were not killed. Frequent annual burning has occurred as a result of military weapons firing with little damage to the standing timber.

# 3. Description of Burn Unit:

- **a. Overstory:** Approximately 50% of the acreage is mature river bottom hardwoods. The rest is open grasslands and old fields in different stages of early succession.
  - **b.** Understory: Fescue grass, tall grasses, blackberry briars, brush, etc.
  - c. Fuels:

- (1) Grasslands (276 acres): Vegetation in the grasslands will primarily be considered as Fire Behavior Model 3 (tall grass) having 2 to 3 tons per acre of available fuel (continuous fuels less than 3 feet in height). Some acreage will be in Model 1 (short fuels less than 1 foot) and due to ground disturbance it may not carry fire on its own.
- (2) **Timbe rlands** (574 acres): Surface burning of timberlands will primarily be considered as Fire Behavior Model 9 (hardwood litter) having 2 to 3.5 tons per acre of available fuel. The lowland drainages located in the woodlands may not burn without being on the low end of the humidity range (35% Relative Humidity (RH) range).
- **d.** Estimated Total Tons for UXO Surface Burning: The estimated total tonnage of fuels to be consumed on 850 acres at 2.5 tons per acre is of 2,125 tons of fuel. This estimate is based on 100 acres of the burn unit not having fuel coverage (miles of roads, wetlands, ponds, target areas, etc.). Emissions from surface burn are as follows:

PRESCRIBED	PARTICULATE	CARBON	VOLATILE
SURFACE BURN	MATTER (PM)	MONOXIDE (CM)	ORGANICS (VOC)
TOTALS	12.8 TONS	78.9 TONS	3.8 TONS

- **4. Topography:** Topography of the burn site consists of flat river bottoms with 0% to 10% slopes. This site is part of the Salt River Basin running through Fort Knox from the east and running west to the Ohio River. Downstream direction of the Salt River is south along the proposed range and then west along the south side of the site and then into the middle of Fort Knox's main range impact area. This should have a good effect on night time "down valley wind" drift for the smoke.
- **5. Miles of Fire Line to Establish:** With a Range Division escort, the contractor will survey, and mark the construction area boundaries. At that time Range Division personnel will walk the boundary to surface check for UXO. After the surface check is completed, the contractor will bog and clear a 20' firebreak along the entire east side and south boundaries of the burn unit. The rest of the unit can use existing roads and natural barriers. There will be a vegetated buffer of approximately 400 feet along the Salt River. Flagging shall be by surveyor tape or paint. No stakes shall be driven.
- **6. Complexity Level: Expert.** Fire cannot be managed if it escapes out of the burn unit. Therefore, the Burning Crew must know how to ring the burn units where as to insure no escapes happen. UXO considerations along with Smoke Management requirements all add to the complexity of this burn.
- **7. Specific Objectives:** This burn is being conducted to remove the grass and leaf litter so that the personnel doing the UXO search can locate any unexploded ordinance..

# 8. Special Considerations:

a. Safety: This is a known military range impact Area where high explosive ordnance has been used and some may not have exploded upon impact. Fire has been known to

detonate UXO. Therefore, the normal Army policy will be followed which is to set the fire and back off all personnel to a safe zone until they have permission to reenter the safety zone or the fire is out.

- **b. Fire Lines Construction:** Due to not being able to keep personnel on the fire line, the line construction will need to be wider than most lines which will reduce the chance of the fire escaping while the line is not manned.
- **c. Smoke Management Requirements** Jefferson County is in an ozone maintenance area and Shepherdsville (Bullittt County) is listed by the EPA as a non-attainment area (see attached maps for details) which means we will not be allowed to burn on days that will have transport winds that will carry smoke from Fort Knox into these areas. Joe Ammerman, US Weather Service in Louisville (502-962-6426), will assist in providing Fort Knox forecast data for weather patterns that will predict what days burns can be conducted.

# 9. Public Notification: Prior to burning, the following agencies will be notified:

<u>Name</u>	<b>Contact Method</b>	
Mayor, City of Shepherdsville	Telephone	
Bullitt County Judge Executive	Telephone	
Bullitt County Volunteer Fire Depts.	Telephone	
(Central Dispatch)		
Kentucky State Police	Telephone	
Kentucky Division of Forestry	Telephone	270-766-5010
Fort Knox Fire Department.	Telephone	
Fort Knox DBOS Forestry	Telephone	502-624-8147
Fort Knox Public Affairs Office	Telephone	

- 10. Hazard Analysis: The Fort Knox Range Control Manager will conduct the burn in accordance with this document and using all safety procedures required for conducting prescribed burns on Army lands. State of Kentucky Red Flag Criteria will be considered in the planning. (Red flag criteria occurs when the 10-hour fuel moisture is less than or equal to 8% and Relative Humidity is less than or equal to 25% and winds are greater than or equal to 15 miles per hour.). No burning will be take place on days where Red Flag Warnings are likely to be forecasted.
- 11. Contingency Plans: The Salt River will serve as the secondary break on the south and east boundaries of the burn unit. Federal land east of the Salt River has trails and a 50-foot firebreak on the US Boundary maintained by DBOS. If the fire escapes to the south or east and it spots across the river, all of the agencies listed in **Paragraph 9**, **Public Notification**, will be notified that there is a wildfire. Fire escapes to the west and north can be contained by back firing off of existing roads and firebreaks.

# 12. Prescribed Burn Execution:

**a. Organization:** A fireline will be placed around the footprint of the construction clear boundary. During construction of the firebreak, the contractor will have two personnel qualified

in CPR and first aid. During execution of the burn, the organization will consist of the burning boss, igniters, at least one person trained in first aid, and the appropriate number of fire fighters needed to conduct the number of acres for that day's burn. A Medical Evacuation Helicopter will be on stand by during all burns.

- **b. Firing, Containment, Mop-up and Patrol Procedure:** Back fire the footprint of the construction clear zone. Igniters are to keep moving around the line and leave the area once the burn unit is encircled with fire. A forward observer will be posted to keep the crew informed of the fire's behavior and if any fire is spotted across the fire line.
- **c.** Mop up will not be attempted on fires inside of known impact areas due to personnel safety concerns. Crews will be maintained in the area at a safe distance from the burning till the Burning Boss declares the fire out.

# 13. Smoke Management

- a. Areas with existing Visibility or Air Quality Problems
- (1) **Identified**: Jefferson Co. is in an ozone maintenance area and the City of Shepherdsville (Bullitt County) is in an Environmental Protection Agency (EPA) non-attainment area. **Burns will take place between 1 November 28 February.**
- (2) Identified Areas to be Mitigated: Prior to commencing a burn, winds must be favorable to keep the smoke management zone on and over the Fort Knox interior impact area, and away from Jefferson County and Bullitt County. No private properties are located within one mile of the proposed burn unit.

<u>Mitigating Measures to be taken:</u> Burning will only be allowed on days having winds out of a favorable direction to prevent air quality impacts to Jefferson or Bullitt Counties. US Weather forecasters will be consulted before burning to insure that the winds will have the durations and anticipated length of the proposed burn.

- (3) Areas Requiring Patrols: Post observers to patrol and to report to the Burn Boss that the areas identified in Paragraph 13a are not receiving smoke.
- 14. State Burning Permit Number and Date: None required
- **15. Prescribed Parameters and On Site Observations**: The Burn Boss will follow the attached prescription parameters.

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	Region/ Forest standard	Prescription	Forecast	Forecast	Test Fire	Post Fire	Post Fire	Post Fire
DATE/TIME								
1. FUEL MODEL		3 and 9			XX	XX	XX	XX
2. FUEL STICKS - NFDRS	>= 7%							
or On-Site	>= 9%							
3. MAX. TEMPERATURE								
Dormant Season	< 75@							
Growing Season	< 85@							
4. <b>RELATIVE HUMIDITY</b>								
Dormant Season	> 25%	> 30%						
Growing Season	> 25%*							
5. WIND DIRECTION								
6a. WIND SPEED - 20 FT	< 18 MPH							
6b. WIND SPEED - MIDFLAME								
7. DISPERSION INDEX					XX	XX	XX	XX
8. BURNING INDEX	< 48				XX	XX	XX	XX
9. IGNITION COMPONENT	< 50				XX	XX	XX	XX
10. MIXING HEIGHT	CHART	CHART			XX	XX	XX	XX
11a. DAYS SINCE RAIN: <1/2"					XX	XX	XX	XX
11b. DAYS SINCE RAIN: $>= 1/2$ "					XX	XX	XX	XX
11c. AMOUNT					XX	XX	XX	XX
12. FIRING TECHNIQUE		Backing & Strip Head			XX	XX	XX	XX
13. IGNITION		Drip torch			XX	XX	XX	XX
SOURCE/METHOD			<u> </u>	<u>-</u>			]	
14a. TRANSPORT WINDSPEED	CHART	Chart			XX	XX	XX	XX
14b. DIRECTION								
15a. 1 - HOUR FUEL MOISTURE	-7%				XX	XX	XX	XX
15b. 10 - HOUR FUEL MOISTURE								

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15c. 100 - HOUR FUEL MOISTURE			XX	XX	XX	XX
15d. 1000 - HR FUEL MOISTURE			XX	XX	XX	XX
15e. WOODY FUEL MOISTURE			XX	XX	XX	XX
15f. HERB. FUEL MOISTURE			XX	XX	XX	XX
16. SPREAD COMPONENT			XX	XX	XX	XX
17. ENERGY RELEASE COMP.			XX	XX	XX	XX
18. FLAME LENGTH	2 - 8 FEET					
19. DROUGHT CODE (KBDI)	<= 400		XX	XX	XX	XX
20. IGNITION PROBABILITY	<= 50		XX	XX	XX	XX
21. SCORCH HEIGHT						

- All prescription items to be completed at planning time.
- All forecast items to be completed on the day of the burn.
- Test fire and post fire weather parameters must be taken on-site.

# **SMOKE DISPERSION INDEX TABLE**

Transport Wind Speed (Meters/Second)	Mixing Height Minimum (Meters)
3.0	850
3.1	790
3.2	740
3.3	700
3.4	660
3.5	630
3.6	600
3.7	570
3.8	550
3.9	520
4.0	500

R8-FS-5100-6

16. Plan Preparation, Review and Approval:		
Plan Prepared By:		
	Date	
Dan Puckett, Forester Fort Knox Area Office U.S. Army Corps of Engineers CELRL-RE-C		
Plan Reviewed By:		
	Date	
J. PETER HILL Administrative Law Attorney Office of Staff Judge Advocate		
Plan Approved By:		
	Date	
Albert W. Freeland Chief, Environmental Management Division Directorate of Base Operations Support		
Togonh V. Mugaanella	Date	
Joseph V. Muscarella COL, Engineer		
<b>Director of Base Operations Support</b>		

<b>17.</b>	<b>Approval</b>	for	<b>Execution</b>	of Burns
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	Date	
F.L. Andrews		
Chief, Range Division		
Directorate of Plans, Operations & M	obilization	
18. Attachments (required):		
1. Descriptive Map of Area.		
2. Risk Assessment.		
3. Smoke Screening Map.		
4. Organization Chart.		
5. Weather Forecast.		
6. Other attachments as may be ne	· · · · · · · · · · · · · · · · · · ·	ysis,
Organizational Chart of burning crew	<b>y</b> , etc.)	
	Date	
Burning Boss		
20. Fire Declared Out:		
	Date	
Burning Boss		
21. Notes:		

22.	Post Burn Evaluation:
	a. Date:
	*b. Amount Litter (%) Left:
	c. Understory Vegetation Consumed (%):
	*d. Spotting/Jump-overs
(%)	e. Understory Kill of Undesired Vegetation
	*f. Any Smoke Management Violation: Yes/No): DESCRIBE:
	*g. Any Escape: (Yes/No): DESCRIBE:
	h. Any Complaints (explain):
	i. Adverse Effects: (Yes/No): DESCRIBE:

J. Restoration Needed:		
k. Objectives Met (results): (Yes/No):	DESCRIBE:	
Evaluation By:		
	Date	_
1. Recommendation for future evaluation		

RISK (Potential Loss)	RISK TOLERANCE (or Consequences)	PROBABILITIES  (or Loss)  AMENDMENT NO.
FIRE (ESCAPE)	_	AMENDMENT NO.
		2
1. Private Timber US Timber	1. CAN ACCEPT RISK. Can be replaced.	1. Moderate - Patrol, and mop-up throughly.
2. Private Dwelling	2. CANNOT ACCEPT RISK. Closest private property is one and a half miles to the east. Area is known as Beech Grove.	2. Moderate - Fire out early, patrol and mop-up along pvt. Have engine on site if fire escapes burn unit.
3. Fences	3. CAN ACCEPT RISK Closest fence is our boundary line fence one mile to the east.	3. Low –.
4. Plantations	4. CAN ACCEPT RISK WITH MITIGATION There are no plantations in the area.	4. Low -
<ul><li>5. T&amp;E Species</li><li>Indiana Bats summer roost in this area.</li><li>6. Unexploded Ordnance</li></ul>	5. CAN ACCEPT RISK WITH MITIGATION CANNOT ACCEPT RISK Once fire is ignited, personnel will leave area to a safe zone	<ul> <li>5. Low - All Indiana Bats should be gone by 15 Oct.</li> <li>6. Low - Fires has set off UXO on other clearing. Personnel will back off to a safe zone after igniting.</li> </ul>
SMOKE MANAGEMENT	area to a safe zone	to a safe zone after igniting.
<ul><li>1. Roads - Highways</li><li>A. State Highway 1494</li><li>B. State Highway 44</li><li>C. US Interstate Highway I-65</li></ul>	1. CAN ACCEPT RISK WITH MITIGATION. A. 2 miles east B. 4 miles north C. 5 miles east	Low - Burnout early, monitor frequently. Put notice of intent to burn in local papers.  Will only burn have north east winds.
D. Pitts Pt. Road 2. City of Shepherdsville Churches/Schools Hospitals Smoke-Sensitive Person	D. 2 miles north 2. CAN NOT ACCEPT RISK Down town 4 miles NE City limits 1 ½ miles east. EPA Non-attainment Area. (our northern	2. Low - Avoid by insuring we have a northeast wind.
3. Stream Crossings Down Drainage Research Plots	boundary and east boundary to Beech Grove.  3. CAN ACCEPT RISK  Down river is into the middle of the Fort  Knox Impact Area which is Off Limits to  everyone.	3. Low - Burnout early, use prescribed dispersion, and post signs in potential problem areas.
4. Private Dwellings	4. CAN ACCEPT RISK Use of north east winds should insure that no private dwellings are impacted. 5. CAN ACCEPT RISK	<ul> <li>4. Low - Use good Mixing Height and Transport Wind Speed. Mop-up heavy smoke areas.</li> <li>5. Low – Will not plan burn units</li> </ul>
5. Night time smoke	Burn unit acreage will be planned and started so as to be out by dusk.	larger than we can do during normal daylight hours.

# DAILY PRESCRIBED BURN CHECKLIST

COM	MPARTMENT #
	DATE
MANA CEMENT CODE	
MANAGEMENT CODE	
BE REVIEWED	
SMOKE SCREENING DONE	
WEATHER FORECAST	
RUN BEHAVE PROGRAM	
DISPATCH CONTACTED	
MAPS AND PHOTOS PREPARED	
RCW CAVITY TREES RAKED	
SIGNATURES ON PLAN PRESCRIPTION PARAMETERS MET	
CONTACTS MADE	
ALL PREP WORK DONE	
ALL FREE WORK DOINE	
BRIEFING	
SAFETY	
PERSONAL PROTECTIVE EQUIPMENT	
HELICOPTER SAFETY	<del></del>
COMMUNICATIONS	
SMOKE SIGNS	
T & E PLANTS	
SPECIAL AREAS (REC. AREAS, HUN	T CAMPS REE APAIRIES ROAT
LANDINGS, ETC.)	1 Cravit S, DEL 74 MIXIES, DOM
ASSIGN CREWS	
TRACTOR LOCATIONS	
BURNING FUEL/MATCHES	
TEST FIRE OK	
POST BURN	
EVALUATION DONE	
WEATHER RECORDED	
ANY PROBLEMS OR COMMENTS:	

# ATV RISK ASSESSMENT PRESCRIBE BURNING

# **HIGH RISK FIRING**

Cross country firing
Firing in thick fuels
Firing in boggy ground

# **MITIGATIONS MEASURES**

Firing in any of the above situations shall be done in tandem **ONLY TANDEM**: One ATV firing, with one ATV serving as a lookout

# **MODERATE RISK FIRING**

Firing from plowed fireline
Firing from ditch along forest road
Firing in tandem cross country
Firing from forest travelway (moderately used)

# **MITIGATIONS MEASURES**

Operator to check in with Firing Boss every 15 minutes.
Fire with engine support
Ensure water and fuel tanks are more than 1/2 full.
Follow the guidelines as listed in the Operations section of the ATV Torch Operations Guide.
(THESE ARE MANDATORY)

# **LOW RISK FIRING**

Firing from graded forest road Firing from forest travelway (well used) Spot firing

# **MITIGATION MEASURES**

Follow the guidelines as listed in the Operations section of the ATV Torch Operations Guide. (THESE ARE MANDATORY).

•

	Burning Unit Name and Location	on
	Organizational Chart of Burn	ning Crew
Burning Boss:	(Al	
	(Name)	
Ignition Specialist:		
Ignition Crew:		
Fireline Crew Boss:	:	_
Crew Members:	······································	<del>,</del>
	,	, ,
		,
	,	<b>,</b>
Equipment Boss:		
Equipment operator	rs:	
Observer:		
Observer:		
T		
	ommunications that will be used able	:, an
	D:	ate
Burn Boss signatur	<u> </u>	



# **NWCG PRESCRIBED FIRE GO/NO-GO CHECKLIST**

Yes	No	Questions
		Are ALL fire prescription elements met?
		Are ALL smoke management specifications met?
		Has ALL required current and projected fire weather forecast been obtained and are they it favorable?
		Are ALL planned operations personnel and equipment on-site, available, and operational?
		Has the availability of ALL contingency resources been checked, and are they available?
		Have ALL personnel been briefed on the project objectives, their assignment, safety hazards, escape routes, and safety zones?
		Have all the pre-burn considerations identified in the prescribed fire plan been completed or addressed?
		Have ALL the required notifications been made?
		Are ALL permits and clearances obtained?
		In your opinion, can the burn be carried out according to the prescribed fire plan and will it meet the planned objective?

If all the questions were answered "YES" proceed with a test fire. Document the current conditions, location, and results

PMS 421 (1/02)

# THE FOLLOWING LIST OF QUESTIONS AND ANSWERS ARE THOSE THAT HAVE BEEN RESOLVED AS OF THE DATE OF THIS AMENDMENT. ANSWERS TO OTHER OUTSTANDING QUESTIONS WILL BE PROVIDED TO SUBMITTER AS THEY ARE RECEIVED.

1. Question: Where is the detail for the trench shown on the plan sheets?

Answer: The Task B trenches shown on Sheets C-61 and C-68 are not in the contract. The MG-2 bunker shown on Sheet C-66, the MG-1 Observation bunker shown on Sheet C-67 and the MG-3 bunker shown on Sheet C-67 are not in the contract.

- 2. Question: I see two different time frames to burn this winter. Which is correct?
- 3. Question: Amendment No. 0002, Section 0223a, clearing & grubbing, para. 3.5.2, page 4 states Jan 1, 2003 to Feb 28, 2003. Appendix "A", Item #1c, page 1 states November 1, 2002 to Feb 28, 2003.

Answer No. 2 and 3: Burning has been removed from the project scope.

4. Question: Note on C-4 says to see range plans for Demolition of Pitts Point Rd. Plan sheets C-41 and C-43 make no mention of removal of Pitts Point Road. Does Pitts Point Road get removed and what are limits? Does it get topsoil and seeded?

Answer: The Demolition of Pitts Point Road was removed from the contract. On the plans, a gate is shown blocking future access of this road from the north.

5. Question: The typical road/trail sections on Sheet C-8 does not indicate any underdrains like the one shown on C-25. If all roads, trails, and service roads gets this underdrain then it should state so. Details on locations or how often there is to be an outlet. Provide guidance.

Answer: The subgrade drainage trench detail shown on C-25 would only be used on the roads and trails if ground water was encountered. It is intended primarily for the underdrain shown on C-40.